

Weekly Report

12/21/2015 - 12/27/2015

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1 Summary

This week I mainly focus on the DataScanner project and new project idea initialization.

2 Projects

2.1 The DataScanner Project

I've started data processing of the MovieLens dataset. The dataset contains 4000 dimensions (4000 movies). Thus the view-wise (nearly 4000*4000) computation is very time-consuming.

Next week, I will complete the first version of the paper.

2.2 The GeoScanner Project

I discussed with Xumeng Wang about the data processing again. And we finalized the processing as binary tree partition of the three dimensions (latitude, longitude and time) first, aligning data based on the same time steps (do interpolation when data is not available), encoding locations and trajectories, re-doing quad-tree partition with geo-information, re-encoding locations and trajectories, compressing.

The data processing should support both comparison and rendering of locations and trajectories with compressed data rather than raw data, with the purpose of saving space as well as time.

I set up a Spring (Java) server this week and started designing the system interface by walking through every steps of case reasoning. More work to be done next week.

3 Paper Reading and Miscellaneous

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4 To Do List

1. DataScanner writing and MovieLens dataset.
2. GeoScanner idea initialization.